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ABSTRACT

The role of women as higher education faculty and administrators is investigated in this portion of a review of the literature on academic women since 1970. The various types and orientations of the studies reviewed are discussed and analyzed. The topic of sex discrimination was found to dominate a majority of the research on faculty women. Two types of discrimination studies are discussed: descriptive and explanatory. The descriptive research tended to produce similar conclusions: faculty women's mobility, promotion rates, salaries, access to research and opportunity networks, are all subject to discrimination in relation to men. The explanatory studies examine such questions as why there is discrimination and how it works. Productivity and success elements are also examined in these studies that focus on the significance of the differences between males and females. The theme of discrimination was found to be central to the research on women administrators. In general the research shows that administrative employment patterns vary substantially by race and sex, and that salary differentials are most consistently related to sex. Examples from specific works are cited in the analysis of research on both women faculty and administrators. It is concluded that this literature review provides an assessment of the efforts to equalize the opportunities and advantages available to women. Recommendations for further study are included as well as an extensive bibliography. (SF)

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Recent Trends in Research on Academic Women: A Bibliographic Review and Analysis

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By 1978 there can be no question that the place of women in the academic world has emerged as a highly significant issue. Research has burgeoned in response to the stimulus of affirmative action programs, but also because academic women themselves have begun to examine their condition using the research skills with which they were trained. The large number of studies during the last decade relating to women as faculty and administrators has taken as many directions as there have been disciplines involved. Regrettably, much of this work has remained isolated in the various disconnected disciplinary pe iodicals. Hence it has been ineffectual in providing any summative assessment of women's roles and experiences in academia. The objectives of the present study were to prepare a research bibliography (Moore and Wollitzer, 1979) which would:

1. Include a thorough search of the literature on academic women that has appeared since 1970; and

2. Take stock of that literature in such a way that trends, patterns, and research paradigms could be distinguished and areas needing further attention could be defined.

Perspectives

When a topic spans many disciplines, as this one does, it is often not the topic itself, but rather a disciplinary base which forms the motive of inquiry. Hence some of the research that was reviewed used academic women as the object of the study, but not as its chief raison d' etre. Breakthroughs in knowledge are frequently attributable to such connections between an old discipline and a new subject area, and women are not the first to benefit from such discipline-based or theoretical approaches. (Kuhn, 1962)

Looking at the whole of the work assembled during the past few years one cannot help sensing the excitement, passion and thrill of discovery that the research represents. Here are hundreds of able, often beginning researchers, mostly women, engaged in an endeavor that can be likened to the discovery of a new continent--so little has previously been known or studied about women and so much assumed. These researchers have finally broken with the silent conspiracy that women are not a fit subject for scholarly inquiry. And now that the ground has been broken, money is also coming to finance the research and to implement the findings that flow from it. We were encouraged by the number of excellent studies we uncovered. Far from being a mere "flash in the scholar's pan," the quality and quantity indicate that research on women will continue to flourish.

Methods

The total bibliography we developed included seven topic chapters categorized according to the various roles women hold in higher education from student through faculty member and administrator. For purposes of this presentation, we have limited ourselves to two roles: faculty and administrator. Within these categories, the research was organized according to concepts or research areas derived largely from an inspection of the research itself. That is, we imposed no abstract categories within the chapters, but rather attempted to reflect the groupings that occurred naturally.

Our criteria for inclusion of citations were essentially three: that items fit the above categories at least loosely, qualify as research (although not necessarily empirical research), and have a publication date no earlier than 1970. Dissertations were not included largely for reasons of inaccessibility and economy of effort.

Data Source

The identification of sources began with an extensive search of the Educational Resources Information Center (ERIC) system and the Social Science Citation Index for the period 1970-1978. Leads resulting from the bibliographies of appropriate items were then pursued. The most recent literature was searched source by source, proceeding essentially from the authors' knowledge of and familiarity with appropriate sources, and the senior author's previous research on academic women.

Over 450 separate entries are included in the bibliography as a whole, with approximately 200 involving women as faculty or administrators. We do not consider this number to be the universe of articles. The bibliographer's nightmare is not simply failing to find newly published articles but discovering that older ones were overlooked. What follows is a selective analysis of the research entries contained in the Bibliography.

Discussion: Women Faculty

Faculty women have been the object of scrutiny ever since the first ones were hired in the nineteenth century, but serious study has been a recent and growing phenomenon. One has only to recall that Jessie Bernard's seminal work, Academic Women, was published in 1964. Even so in the relatively brief time since then the difference in perspective exhibited by recent works is quite striking. The driving motive for much of the 1970's research is one which was handled only indirectly, even indifferently by Bernard in 1964: discrimination.. The earlier works invariably started from a presumption, acknowledged or silent, that there are inherent differences between women and men, while the studies of the current decade start from a presumption of equality. By beginning with different presumptions, different conclusions

are often reached concerning similar phenomena. For instance, in discussing the differences in rank and salary, Bernard did not view them as prima facie evidence of prejudicial treatment; rather she sought to explain why such differences existed based on the differences in the lifestyles, values and experiences of her sample of academic women. Today, studies are likely to attribute the differences in rank and salary to discrimination, meaning unjust or prejudicial differentiation. In a certain way, Joan Abramson's book, The Invisible Woman, (1975) is the classic 1970s response to the studies of the 1960s. Her autobiographical case study of the denial of tenure to her at the University of Hawaii is a vivid description of how sex discrimination works in academe.

This perception of discrimination so predominates most of the research we reviewed for the 1970s, that the majority of studies can be categorized under it. We discerned two principal types of such studies: descriptive (or demographic) and explanatory. The descriptive studies consisted essentially of two types. The first are expository pieces which deal with the general nature and scope of discrimination. These studies take as their question: Is there discrimination against women as faculty? If so, in what way? The large number of studies which were generated in response to the demands of affirmative action policies at specific institutions fall into this category since they were specifically designed to answer that question. (These studies are contained in a separate section of the Bibliography.) There are also studies of national scope, such as Astin and Bayer (1972, 1975), Farber (1977), Johnson and Stafford (1974), Peters (1974), that attempt to describe the status of faculty women in relation to their male colleagues, taking into account differences by institution, rank, tenure and other variables such as

part-time/full-time status. Separate studies are also available which focus on only one or two aspects such as part-time, full-time (Flanders, 1976), fringe benefits differentials (Bernstein and Williams, 1974), participation in governance, (Hollon and Gemmill, 1976), salaries (Koch and Chizmar, 1976). Another major group are the status reports by discipline, (e.g. Farber, 1977; Deutrich, 1975; Fields, 1974; Green, 1976; Hughes, 1973, etc.) or other professional associations such as the AAUP (Mackay, 1970; Gray, 1976), NEA (1971), or AAUW (Oltman, 1970; Howard, 1978). (See also Freeman, B. F., 1977). Representation across the disciplinary spectrum is fairly complete. In general, the statistical presentation in most pieces is good, but overall quality is uneven. Many of these studies are currently being done on a time-phased (annually or biennially) basis and may constitute a base from which subsequent longitudinal studies can be done.

Longitudinal analyses as such are quite rare. Data are available on salaries, rank, and tenure ratios back to the 1930s, but to our knowledge, with the exception of two studies of Minnesota faculty women (Eckert and Stecklein, 1959; Eckert, 1971) and to some extent the work of Astin and Bayer (1972, 1975), little has been done in this area whether or not discrimination is a central question in the research. We simply know very little about academic women over time. In this regard, a vital role can be played by historical analysis, which we will address in a following section.

Turning to other descriptive studies of discrimination, there is a fruitful area to be developed concerning the international dimension. We located three articles dealing with the British situation (Masterman, 1974; Rendel, 1975; Blackstone and Fulton, 1974). By now there is undoubtedly research pertaining to other countries, and there ought to be comparative

studies between countries and disciplines, but we did not find them.

We have labeled the second group of studies describing discrimination, "strategies and measurements". The works in this group range from suggested methods for determining the level and intensity of discriminatory practices on campus,(e.g. Bergman and Maxfield, 1975; Greenfield, 1977; Reagan and Maynard, 1974) to strategies for improving women's status (Kimmel, 1972, Peden and Sloan, 1975). There are a few studies which focus on the impact of lawsuits and other legal action,(e.g. Clark, 1977; Fields, 1977, 1971). A particularly detailed study has been done by Theodore, "Academic Women in Protest", (1973) which analyzes the protest cases of 65 faculty women. Collective bargaining is examined in several studies, each taking as their point of view the utility of collective bargaining in correcting discrimination against women (Lussier, 1976; Reuben and Hoffman, 1975; Sandler, 1974; Schmeller, 1973; Smith, 1973). The importance of the department in faculty matters is well-documented by other studies not dealing with women, but only one entry in this group (Wasserman, Lewin, and Bleiweis, 1975) focuses on departmental rather than general institutional conditions that promote or discourage discrimination.

In general, the research we reviewed regarding both descriptive and strategic aspects of discrimination tended to produce similar conclusions. Faculty women's mobility, promotion rates, salaries, access to research and opportunity networks, are all subject to discrimination in relation to men. Until as recently as 1970 such discrimination was an open and widely accepted, if not expressly endorsed, practice. Since 1970 discrimination on the basis of sex, it is fairest to say, is becoming increasingly illegal. But these studies also point out that such discrimination as exists is part of a complex, subtle, and often circuitous social structure which is

institutional higher education in the 1970s (Lester, 1974).

It is also clear from our review of these demographic and strategic studies, especially when heeding the tone of many of the pieces, that the authors often believed that if they described and documented discrimination against faculty women, discrimination itself would wither away. It has not. As many of the most recent studies affirm, notably those by the NCES, AAUP and AAUW, discrimination against faculty women persists, and strategies designed to combat it have thus far not brought much measurable change.

We come now to the second research question: Why is there discrimination against women? How does it work? The studies we found dealing with this question are some of the most provocative and penetrating. Many of the studies in this category compare women and men (tacitly or overtly) on what we have called traits, states, productivity and success. The productivity and success elements refer to the usual scholarly measures: productivity, promotion and tenure. The term, "traits" refers broadly to ascribed attitudes and values and to "characteristic" experiences of women academics that may relate to differences in success, productivity or other measures of performance. "States" refers to attributes or conditions such as age, race, disciplinary training, employment at a high or low prestige institution--variables that may also relate to differential success, productivity and other academic behaviors.

The majority of the research in this section has focused on the question, Are women equally productive, less productive or more productive than men? The productivity studies themselves report conflicting findings. Research by Astin and Bayer (1972, 1975) has tended to find that women faculty (they focused on the sciences) are as productive as men and that certain subsets of

faculty women are more productive than their counterpart men. Other scholars (Groth, 1975; Hamovitch and Morgenstern, 1977) have found women to be less productive.

A related question is: Are academic rewards tied to productivity? For example, Ferber and Loeb (1971, 1973) examined correlates of productivity and reward among male and female sociologists while Harlan et al. (1974) carried out a similar inquiry for psychologists. In one way or another, these studies are all dealing with the proposition that if women seem to be discriminated against, it is because they are less productive, and since rewards are tied to productivity it is understandable that women are not paid as much as men. At this time the proposition has neither been confirmed or denied because no comprehensive examination of the question has been conducted across disciplines and with sufficient controls to really get at the substance.

As the productivity and reward studies indicate, however, the comparison of faculty men and women pushes our understanding beyond description toward true analysis. Helen Farmer's article, "Why Women Contribute Less to the Arts, Sciences, and Humanities," (1976) summarizes many of the variables other researchers have been using to explain or predict differences. Her list includes, self-esteem, fear of success, vicarious achievement ethic, home-career conflict, work-discrimination beliefs, sex-role orientation, risk-taking behavior, social structure and perception of parents. With the addition of variables relating to child-bearing and rearing, this would comprise a fairly complete list of the variables used in comparative studies--the combinations employed by each researcher being left to his or her individual conceptual frameworks, originality and creativity. (Hamovitch and Morgenstern, 1977; Liss, 1975)

In short, the effort of these comparative studies that sets them apart from the descriptive studies discussed earlier is that the latter studies usually strive to determine one of two things: (a) are the differences significant? and (b) what do the differences mean? For example, a central argument developed in this category has to do with whether or not differences in research productivity between men and women are the result of differences in values or preferred kinds of academic work or whether the differences are the result of some structured or coercive conditions. This debate has many dimensions. One of the most interesting is being explored by some British academics (Blackstone and Fulton, 1974; Masterman, 1974). In this instance, the researchers examined the same data, but arrived at different conclusions. This is a common occurence in research. What is interesting, however, is that the debate has now become a critique of the methodology and of the values implicit in the methodology by which women's productivity and rewards are measured against men's.

Such debate stems from a far larger and more probing conceptual analysis that has emerged from feminist scholarship in the disciplines. It concerns the nature of the values embodied in the disciplines themselves. Feminist scholars argue that most research knowledge in the social sciences has developed from an examination of man and male behavior. This man-centeredness has biased the knowledge-base of the disciplines themselves. In "Patriarchy as Paradigm", Laws (1973) examines the value orientations of psychology towards males and females as subjects in research. She extends the inquiry into the development of psychology as a field and then to the differential treatment of faculty psychologists by sex. Similar analyses have been or are currently being carried out in other disciplines. These epistemological inquiries have specific implications not only for how research on academic

women is conducted but what is studied. Masterman's study is a case in point of how a different perspective toward academic women brings about a change in the perceived "givens" of academic standards against which both men and women are judged. (See also Steele and Green, 1976).

Another researcher who has focused on the alternate values held by academic women is Tidball (1973, 1974, 1976). Her studies of the educational backgrounds of successful women and her examinations of faculty attitudes toward teaching lead her to conclusions about the nonsupportive nature of many colleges towards women faculty and students and the differences in values involved.

Findings concerning the differing value orientations of men and women faculty have provoked several researchers to examine the socialization processes by which graduate students become faculty. Among these Wiles and Wiles (1976) provide a useful conceptual framework. Studies of women graduate students comprises a section of the Bibliography which for reasons of brevity will not be discussed here. But the issue of formal and informal socialization has been seized upon by a number of researchers as crucial to any explanation of the experience of women faculty (Epstein, 1970).

Another important conceptual root of this concern for socialization has to do with achievement motivation. By now most researchers on women are familiar with Horner's (1969) controversial but nevertheless seminal work on "fear of success". Most of the achievement literature has focused on women students which will not be discussed here and on women administrators which will be discussed in a later section.

The most interesting and provocative studies dealing with success and successful faculty women leads to discussions of professional and peer interactions and networks (Pinson and Caffrey, 1976). For the most part this line of inquiry is only just coming to be a topic of systemmatic study. Previously

it was part of the "folk wisdom", especially in the sciences, about how successful researchers succeed. Biographical and quasi-biographical sources such as the famous book, The Double Helix, have provided powerful leads into this aspect of faculty culture (Knudsin, 1973; Theodore, 1971). A "feminist twist" on the topic derives from the work of Tidball, Astin and others which suggests that women students and faculty are most likely to succeed if they interact with and have available as role models, other women faculty (Tidball, 1973).

In conclusion, it is important to point out where these studies of faculty women are tending and perhaps where they need to go. The descriptive and strategic studies have laid out the basic terraine in which faculty women find themselves. That discrimination is a present and pervausive force is a consistent finding. But it is also clear that both the sources and the effects of discrimination are complex. As to its causes, research points to structural as well as human factors pertaining to both men and women. A clear by-product of these studies is that higher education as an institution is better illumined.

But most important of all, these studies are documentary proof of a profound shift in perspective regarding academic women. It is a shift away from a presumption of differences toward a presumption of equality. This change in point of view is leading to far more sophisticated examinations of scholarly behavior including productivity, rewards and peer interactions. But beyond that, research in the 1980s is likely to probe much more deeply into the very foundations of knowing and knowledge-making. Already virtually every discipline has had to examine its basic premises with regard to women as a subject of study as well as with reference to women as the knowledge-bearers and knowledge-creators. The choice before each discipline in the '80s

is how to shape their particular search for truth. Central to this issue is how women will be treated. Particularly important avenues of research are those dealing with the structure and politics of the research activity itself. That is, how ideas are developed, funded and disseminated; how the informal social networks among which ideas and scholars circulate actually function. Only by studying the constraints women researchers encounter as "outsiders" to this system has there been any effort to reform access routes for the mutual benefit of men and women scholars alike.

Discussion: Women Administrators

Women administrators is an area of research that remains largely unexplored. Little is actually known, though much is presumed, about women's behavior in positions of academic leadership and responsibility. Certainly the operant assumption has been that there are differences and that they reflect negatively upon women. It must also be acknowledged that the number of women holding such positions has been few, and they have been closely confined to a small number of positions and a narrow group of institutions. Hence the opportunity to study women administrators in numbers and contexts similar to men has not been and still is not available. This is dramatically reflected in the small number of studies we were able to find. In the women faculty section we reviewed nearly 200 studies; in the administrator section we had less than 50. Thus the remarks below often reflect the work contained in only one or two studies per topic covered.

As in the studies of faculty women, the central issue in the research on women administrators in the 1970s is discrimination. Both descriptive and analytic approaches are used. Kaufmann's research for the Chronicle of Higher Education (1970) provides a basic status report for the beginning of

the decade with regard to simple position data. Most of the other descriptive studies focus on compensation (Magarrell, 1975). The major study was conducted by Van Alstyne et al. for the College and University Personnel Association in 1977. Over 2700 institutions were included. Overall the findings confirmed that administrative employment patterns vary substantially by sex and race, and that salary differentials are more consistently related to sex than to race. This landmark study will provide the baseline for subsequent comparative and longitudinal research.

Two other studies deserve mention in this context not so much for what they contain, although that also is interesting, but for what they portend in terms of future avenues of research. Jacquelyn Mattfeld's piece, "Many Are Called, But Few Are Chosen" (1972) is now a pungent description of how women administrators fair in the "courteously resistant" Ivy League. It is also one of the important papers presented at the now "famous" 55th Annual Meeting of the American Council on Education. We say "famous" because it became known as 'the conference to which no men came.' The theme was women in higher education. Mattfeld's piece suggests that very little is known about how certain groups of institutions are behaving toward women. Most of the data are aggregated nationally or in some cases by state or professional association. There is not very much research on various subgroups of institutions. Arter's work (1973) on the state universities and landgrant colleges and Pfiffner's work (1975) on women administrators in California community colleges are two prototypes of the sort of research that would be helpful.

The second prototype study is Mattes and Watkins' (1973) comparative research on women and men administrators in schools of education. We located very few descriptions much less analyses of the workings of

institutions through such structures as the college or school. Joan Abramson's book, The Invisible Woman is an excellent exception for although it focused on the plight of a woman faculty member, it says a great deal about how administrators functioned at one institution.

Paralleling another kind of research on faculty women is Reeves' (1975) "Analysis of Job Satisfaction". The study suggests as did similar research on faculty that women derive different kinds of satisfactions from their work than men do, which leads to the potential conclusion that men and women may choose to value different things.

The concepts of sex-role and role socialization as related to various personal characteristics is the subject of studies by Arter (1973), Epstein (1970) and Horner (1971). Regrettably, Epstein's book, Woman's Place, deals with woman as administrators only indirectly, while the other two are narrow in other ways. Research on women in specific roles, namely president and trustee are represented by two studies. Thurston (1975) conducted a survey of women presidents in two-year colleges, but it is largely suggestive rather than analytic. Harnett's (1970) research on the new college trustee draws on data gathered in 1969 on 5,000 trustees, some of whom were women. But again the work tantalizes more than it satisfies--and it is only one study where it would be desirable to have a dozen. Much more can and needs to be done with regard to role concepts and their relevance for women in leadership positions.

Women as leaders is a general topic which has been addressed during this decade. However, much of the work is not empirical. For example, Gordon and Ball's (1977) article on survival dynamics is an expository piece which suggests what is needed for women to succeed in higher education

administration, but the suggestions are neither derived from empirical findings nor are they tested. This is not to put down "pragmatic" commentary but simply to suggest where the next wave of research could begin.

The majority of the leadership literature is often a combination of description and prescription. For instance, a study by Kaye and Scheele (1975) surveyed the 60-odd programs designed to develop women's leadership potential while Oster (1975) provided a participant's observations concerning the Claremont women administrators program. Haines and Penny (1973) and Moore (1976) are proceedings from conferences dealing with various aspects of leadership. Sandmeyer et al. describes an actual program that can be conducted in order to develop leadership skills. All of these works included recommendations for future action in support of women.

Work on sponsored mobility, which developed in part from leadership studies, is likely to prove a new, rich area of research in the 1980s. Touchton and Shavlik (1978) point to the importance of mentoring in their discussion of ways to improve access to top administrative posts. Shapiro, Haseltine and Rowe (1978) take a more theoretical approach, positing a continuum of advisory support relationships from role model through patron and sponsor.

Apart from Turner's (1960) pioneer work on sponsored and contest mobility, the roots of many of the concepts employed in leadership research comes out of the management and complex organization literature. Research on women administrators in the future will likely build more heavily upon the frameworks this literature provides. (Williams, Oliver and Gerrard, 1977)

A work which ties leadership/management literature to a structural analysis of an organization is Kanter's Men and Women of the Corporation (1978).

Although the book focuses on an industrial corperation, the insights and analyses it present concerning organizational behavior at the top has direct theoretical and also pragmatic links to behavior at the top of higher education organizations especially multi-universities, state systems organizations and the like. Moreover, the book proceeds from the same intellectual position as does much of the research already discussed here. A central question of Men and Women of the Corporation is "Why is there differential treatment by sex (and race), and how does it operate to create the organizational strata we observe?" Kanter poses three theoretical constructs concerning power, opportunity, and sex ratios. Under these three constructs Kanter deals cogently with concepts such as mentoring, tokenism, and how the structure of an organization can create or deny opportunity and power to individuals and groups.

The need we observed in our analysis of the research on faculty women for structural analysis is echoed again in the work on women administrators. The descriptive studies provide an overview, but the research of the 1980s must find ways into the phenomena described, and it should proceed from conceptual frameworks such as that provided by Kanter. If that sort of research can be mounted, our knowledge of academic women will have much greater depth and richness and our understanding of higher education will be improved proportionately. Too much of the research we reviewed focused on traits and states, while very little has been done to analyze the structure(s) within which higher education operates. In short, full scale research on women as academic administrators remains to be done. Until it is, knowledge of such women must be inferred from other types of settings and other forms of research.

Finally, another avenue of research on women administrators relates to the specific roles they have held and their contribution over time. In

reviewing research of this decade and before, we were struck by the lack of studies of specific women leaders. There are very few studies of individual women presidents, deans or other top level women. The best researched area is in student personnel having to do with deans of women. Feminist historians generally in this decade have spoken out about the invisibility of women in history. The history of higher education is no less lacking. Historical treatments of women in higher education as leaders or in other roles as students or faculty are rare. There are a good number of dissertations, particularly recently, which suggests work is being done but little has surfaced in published arenas (Goerss, 1977). In a certain respect Bernard's Academic Women (1964) is a historical study. In another decade it may become a primary historical document. Work by Burstyn (1973), Conway (1974), Graham (1974) and a few others is developing our general historical analysis of women, while work by Frankfort (1977), Welter (1976) and others has probed more deeply into women's experience of higher education as students, faculty and administrators. More historical work needs to be done and more already in dissertation form deserves to be published.

This brings us to a comment on the publishing of research on women which as bibliographers we feel uniquely able to make. Although we did not include unpublished works in this analysis, it is clear that the published works are the tip of an iceberg. There is and has been quite a large body of research on women that has not been published. There are many reasons for this, some of which have themselves been researched. For instance, several studies have probed the issue of sex bias in publishing and reviewing (Moore, M., 1978). As a result, some journals have switched to blind reviews with the result that the rate of publication of women's research has increased.

This points at a two-fold problem. First, women as researchers appear not to be getting their work published irrespective of topic. Second, research which takes women as its topic is also not being published. One solution to the former problem has been the blind review; a solution to the second has been the creation of several new journals and numerous newsletters. Of special note are two new journals, Signs: Journal of Women in Culture and Society and Sex Roles. While the creation of new journals is a common occurance in academia when new fields of knowledge develop, it is also true that journals about women deliberately address the additional issues of discrimination against women as researchers as well as the topic of research. Finally, we would be remiss if we did not point out that several established journals and periodicals have contributed substantially to the publication of the research we reviewed. This includes, rather understandably, The Journal of the National Association of Women Deans, Administrators and Counselors which has published special issues as well as continuing articles. In addition, Science, the Educational Record, the American Sociologist, the Journal of Higher Education, Change, the American Economic Review, the AAUP Bulletin and the Chronicle of Higher Education, all have published three or more major pieces on academic women during the decade under review.

Conclusion

Despite a dramatic increase in both the quantity and the quality of research on academic women in the period covered by this bibliography, additional and better conceptualized research remains a pressing need. Taken as a whole, the research affords a self-conscious assessment of how well women and collegiate institutions are doing in their renewed effort to equalize the educational opportunities and advantages upon which so much of our American

career and social structure is hinged. An overview of the findings suggests new directions for research:

1. We need to understand more fully the way in which the structure of higher education affects the development of women in their various roles as students, scholars and administrators. This should include analysis of the dynamics between institutional structure and the individual woman and its effect on values, attitudes and behaviors.

2. A greater emphasis on analytic and evaluative as opposed to descriptive research is needed. More attention must be given to the effects of various programmatic attempts at providing equity, and to evaluations of the outcomes for the institution and the individual. Palliative as opposed to effective efforts need to be identified and reformed.

3. Further exploration of the development of intellect as it relates to women must be undertaken. We need to understand how higher education as a system both perpetuates and also frustrates (or screens) the development of ideas, and how these functions relate to higher education's role as a major access route to society's occupational structure. These interconnections are not well studied, but women's desire for access to both idea-making within academia and to occupations outside it provide impetus for such studies.

Based on this review of the nature and content of research on women as faculty and administrators in this decade in American higher education, it seems clear to us that we stand at a watershed. Academic research can move steadily ahead toward a more holistic view of the world which includes men and women equally, or it can drop back to a plateau of intellectual guerilla warfare about what is worth knowing and who is worthy of knowing it. The choice is in our hands.

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